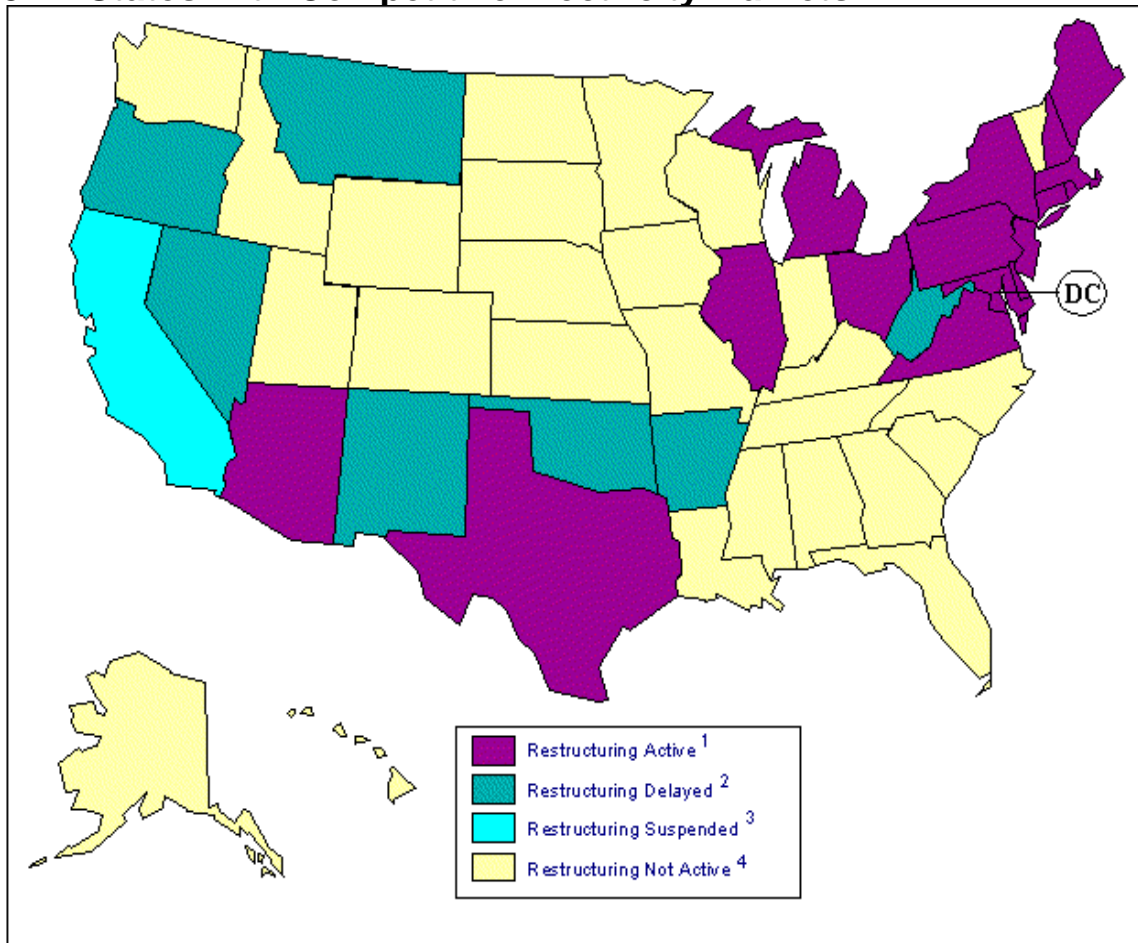


3.1 - States with Competitive Electricity Markets



¹These states have either enacted enabling legislation or issued a regulatory order to implement retail access. Retail access is either currently available to all or some customers or will soon be available. Some states are currently running pilot programs, and they will begin to implement retail access in the near future: Arizona, Connecticut, Delaware, District of Columbia, Illinois, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Texas, and Virginia.

²These states have either passed legislation or issued regulatory orders to delay implementing retail access: Arkansas, Montana, Nevada, New Mexico, Oklahoma, and Oregon. Although West Virginia passed legislation that approved the PSC's plan to restructure and implement retail access, the process is delayed until a bill for tax reform is enacted.

³The CPUC ordered suspension of direct retail access.

Source: U.S. DOE, Energy Information Administration
http://www.eia.doe.gov/cneaf/electricity/chg_str/regmap.html , January 10, 2002.

3.2 - States with System Benefit Charges (SBC)

A System Benefit Charge (SBC) is a small fee added to a customer's electricity bill used to fund programs that benefit the public, such as low-income energy assistance, energy-efficiency and renewable energy. There are 14 states with SBCs through which a portion of the money will be used to support renewable resources. Together, these states will collect about \$4 billion in funds to support renewable resources between 1998 and 2012.

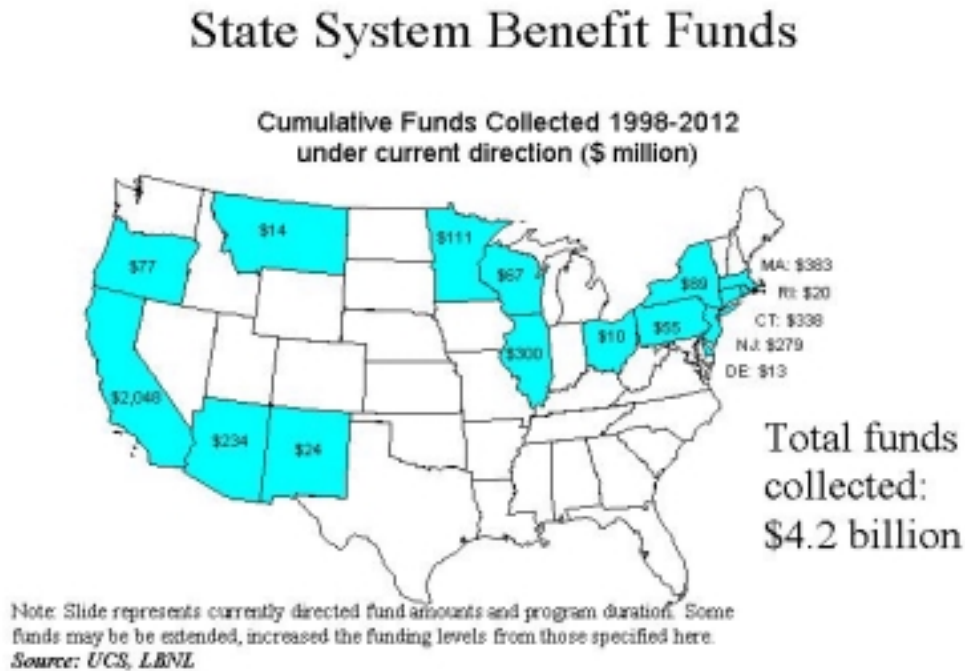
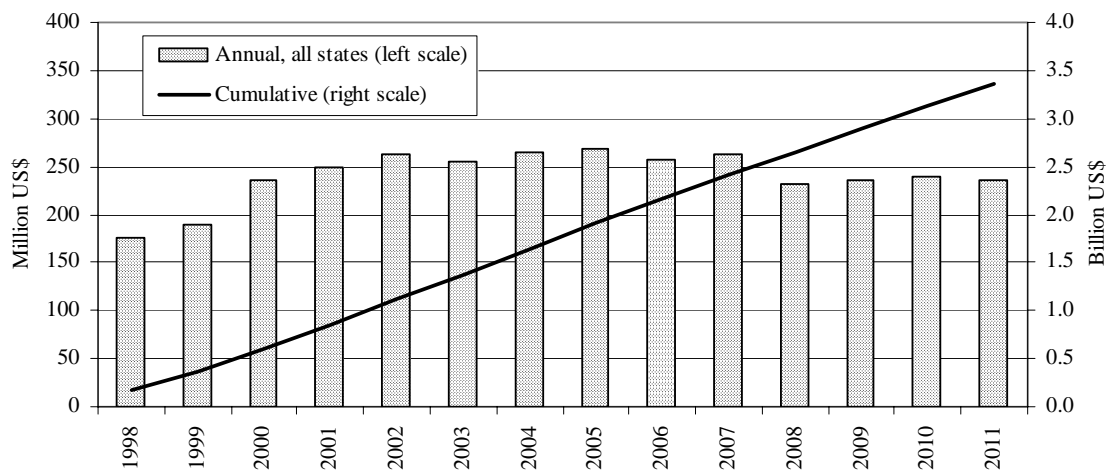


Figure 3.21: Aggregation Annual and Cumulative State Funding



Source: Bolinger et al. 2001.

Table 3.21: Renewable Energy Funding Levels and Program Duration

State	Approximate Annual Funding (\$ Million)	\$ Per-Capita Annual Funding	\$ Per-MWh Funding	Funding Duration
CA	135	4.0	0.58	1998 - 2011
CT	15 → 30	4.4	0.50	2000 - indefinite
DE	1 (maximum)	1.3	0.09	10/1999- indefinite
IL	5	0.4	0.04	1998 - 2007
MA	30→20	4.7	0.59	1998 - indefinite
MT	2	2.2	0.20	1999 - 2005
NJ	30	3.6	0.43	2001 – 2008
NM	4	2.2	0.22	2007 – indefinite
NY	6 → 14	0.7	0.11	7/1998 – 6/2006
OH	15 → 5 (portion of)	1.3	0.09	2001 – 2010
OR	8.6	2.5	0.17	3/2002 – 2/2011
PA	10.8	0.9	0.08	1999 – indefinite
RI	2	1.9	0.28	1997 – 2006
WI	1 → 4.8	0.9	0.07	4/1999 - indefinite

Note: Annual and per-MWh funding are based on funds expected in 2001.

Source: Bolinger, M., R. Wiser, L. Milford, M. Stoddard, and K. Porter. Clean Energy Funds: An Overview of State Support for Renewable Energy, Lawrence Berkeley Laboratory, April 2001.

Table 3.22: State SBC Funding of Large-Scale Renewable Projects

State	Form of Funding Distribution	Level of Funding (\$ Million)	Results ¹	Discounted cents/kWh Incentive over Five Years ²
CA	Five-year production incentive	162 40 40	543 MW (assorted) 471 MW (assorted) 300 MW (assorted)	1.20 0.59 0.75
IL	Grant	0.55 1 0.352 0.55	3 MW landfill gas 3 MW hydro 1.2 MW hydro 15 MW landfill gas	0.57 1.86 1.63 0.11
MT	Three-year production incentive	1.5	3 MW wind	3.63
NY	Grants with performance guarantees	9 4	51.5 MW wind 6.6 MW wind	1.95 6.75
PA	Grant/ production incentive	6	67 MW wind	1.00

¹ Results are projected and are based on announced results of solicitations.

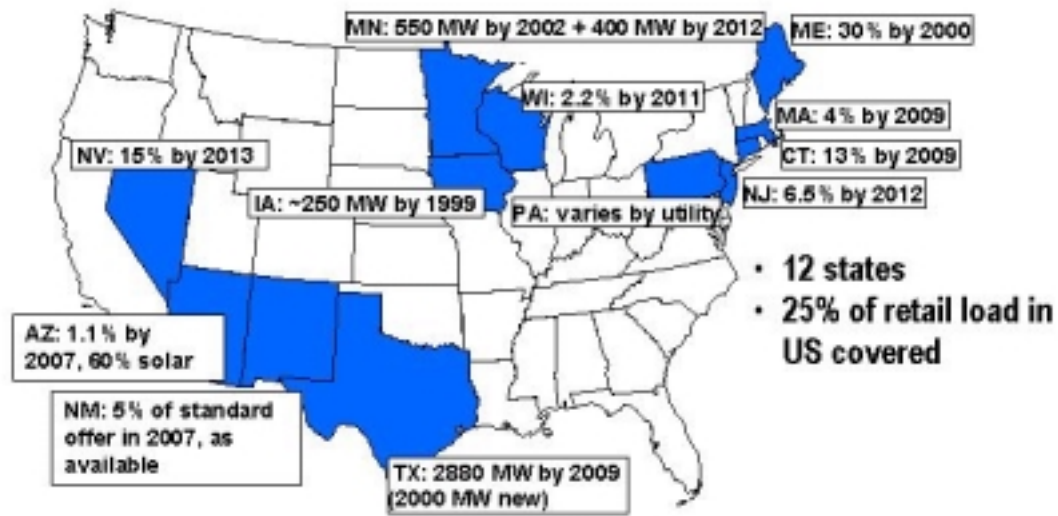
² Incentives have been normalized to their five-year production incentive equivalent using a 10% discount rate.

Source: Bolinger et al. 2001

3.3 - States with Renewable Portfolio Standards (RPS)

A Renewable Portfolio Standard (RPS) is a policy that obligates a retail electricity supplier to include renewable resources in its electricity generation portfolio. Retail suppliers can meet the obligation by constructing or owning eligible renewable resources or purchasing the power from eligible generators. To date, 10 states have adopted RPS policies. Most states have done so as part of electric industry restructuring, although Wisconsin has adopted an RPS without plans to open its market to competition.

State RPS & Renewables Purchase Obligations



Source: Union of Concerned Scientists and Lawrence Berkeley National Laboratory.

Table 3.3.1: State RPS Policies Established Under Restructuring

State	Purchase Requirement
Arizona	0.2% in 2001, rising by 0.2%/yr to 1% in 2005, and to 1.05% in 2006, then to 1.1% from 2007 to 2012. Competitive retail suppliers are exempt until 2004. Utility distribution companies may recover costs of the RPS through reallocating existing SBC accounts for DSM and partly through environmental portfolio surcharge.
Connecticut	Class I or II Technologies: 5.5% in 2000, 6% in 2005, 7% in 2009 and thereafter. Class I Technologies: 0.5% in 2000 + 0.25%/yr to 1% in 2002, 6% in 2009 and thereafter. Revised law in 1999 clarifies that standard is energy based, not capacity based and allows individual suppliers to petition PUC for delay of RPS targets of up to 2 years. PUC has denied at least one petition for delay. PUC has established that RPS shall not apply to standard offer service (slated to expire in 2004), but this decision is under appeal. Unclear if PUC exemption extends to default service.
Maine	30% of retail sales in 2000 and thereafter as condition of licensing. PUC will revisit RPS within 5 years after retail competition. PUC has proposed to eliminate RPS in favor of an SBC.
Massachusetts	1% of sales to end-use customers from new renewables in 2003 or 1 year after any renewable is within 10% of average spot-market price, +0.5%/yr to 4% in 2009, and +1%/yr increase thereafter until date determined by Division of Energy Resources (DOER). RPS draft rules (October 2001) does not propose standard for existing renewables - DOER plans to monitor market and adopt standard if there is significant attrition of renewables.
Nevada	Original RPS in restructuring legislation replaced with new RPS legislation in summer 2001. Starts at 5% in 2003 and rises by 2% every two years until reaching 15% in 2013 and thereafter. At least 5% of the standard must come from solar (PV, thermal electric, or thermal).
New Jersey	Class I or II Technologies: 2.5% when BPU adopts interim standards with no sunset. Class I Technologies: 0.5% in 2001, 1% in 2006, +0.5%/yr to 4% in 2012.
New Mexico	Restructuring and original RPS delayed until 2007, interim RPS currently under consideration: 1% by 9/02, 3% by 9/03, 5% by 9/04. After 9/05, rule may be modified to apply to standard offer customers only, or may be withdrawn.
Pennsylvania	For PECO, West Penn, and PP&L, 20% of residential consumers served by competitive default provider: 2% in 2001, rising 0.5%/year. For GPU, 0.2% in 2001 for 20% of customers, 40% of customers in 2002, 60% in 2003, 80% in 2004 and thereafter.
Texas	Legislation establishes renewable energy capacity targets: 1280 MW by 2003 increasing to 2880 MW by 2009 (880 MW of which is existing generation). RPS rule translates capacity targets into percentage energy purchase requirements.
Wisconsin	0.5% by 2001, increasing to 2.2% by 2011 (0.6% can come from facilities installed before 1998).

Table 1. RPS Policies Established at the State Level Under Restructuring (continued)

State	Resource Eligibility	Credit Trading
AZ	2001—at least 50% solar electric—remainder from R&D, solar hot water, or other in-state landfill gas, wind and biomass. R&D investment can reduce RPS target by 10% 2002-2003—same as 2001 except R&D investments can reduce RPS target by up to 5% 2004-2012—at least 60% solar electric—remainder from solar hot water and in-state landfill gas, wind and biomass Out-of-state solar appears eligible; landfill gas, wind and biomass must be in-state	To be determined
CT	Class I: solar, wind, new sustainable biomass, landfill gas, and fuel cells; Class II: licensed hydro, MSW, other biomass. Out of state resources eligible.	Law allows suppliers to satisfy RPS by participating in credit trading program approved by the state, but state PUC has indicated it has no plans to establish a credit trading program; may allow private actors to develop trading system
ME	Fuel cells, tidal, solar, wind, geothermal, hydro, biomass, and MSW (under 100 MW); high efficiency cogeneration of any size; resource supply under this definition far exceeds RPS-driven demand. Out of state resources eligible; energy must be delivered to the ISO-NE control area and meet load in New England	PUC decided against credit trading to maintain consistency with regional disclosure tracking systems
MA	Solar, wind, ocean thermal, wave, or tidal, fuel cells using renewable fuels, landfill gas, waste-to-energy, hydro, and low-emission, advanced biomass; waste-to-energy and hydro cannot count toward new standard; new renewables defined as those that begin commercial operation or represent an increase in capacity at an existing facility after December 31, 1997; DOER can add technologies after hearings. Out of state resource eligible.	Credit trading would require subsequent legislative approval; DOER recommends against the creation of a Massachusetts-specific renewable energy credit market, because of the more comprehensive New England Generation Information System currently being developed
NV	Wind, solar (PV, solar thermal electric, solar thermal that offsets electric use), geothermal, and biomass energy resources that are naturally regenerated. 5% of each year's standard must come from solar. Unclear whether out of state resources are eligible.	Legislation allows credits, but PUC rule does not implement.
NJ	Class I: solar, PV, wind, fuel cells, geothermal, wave or tidal, and methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner; Class II: hydro and resource recovery facilities in states with retail competition. Out of state resources eligible generally; Class II technologies must come from states open to retail competition	Electric suppliers may satisfy the RPS by participating in a renewable energy credit trading program approved by the Board of Public Utilities (BPU); interim RPS rule does not establish such a system
NM	Wind, solar, geothermal, biomass, hydro, and fuel cells. Out of state resources are eligible	Allowed, but not required or provided for in proposed rule
PA	Unspecified	Unspecified
TX	Solar, wind, geothermal, hydro, wave, tidal, biomass, biomass-based waste products, landfill gas. Out of state resources not eligible unless dedicated transmission line into the state	Texas is first state to establish credit trading program; ERCOT ISO selected as the program administrator
WI	Wind, solar, biomass, geothermal, tidal, fuel cells that use renewable fuel, hydro under 60 MW; eligibility may be expanded by PUC. Out of state resources are eligible	Legislation allows renewable purchases to be satisfied through the purchase of renewable energy credits; credits awarded for renewable energy generation over RPS requirement

Table 1. RPS Policies Established at the State Level Under Restructuring (continued)

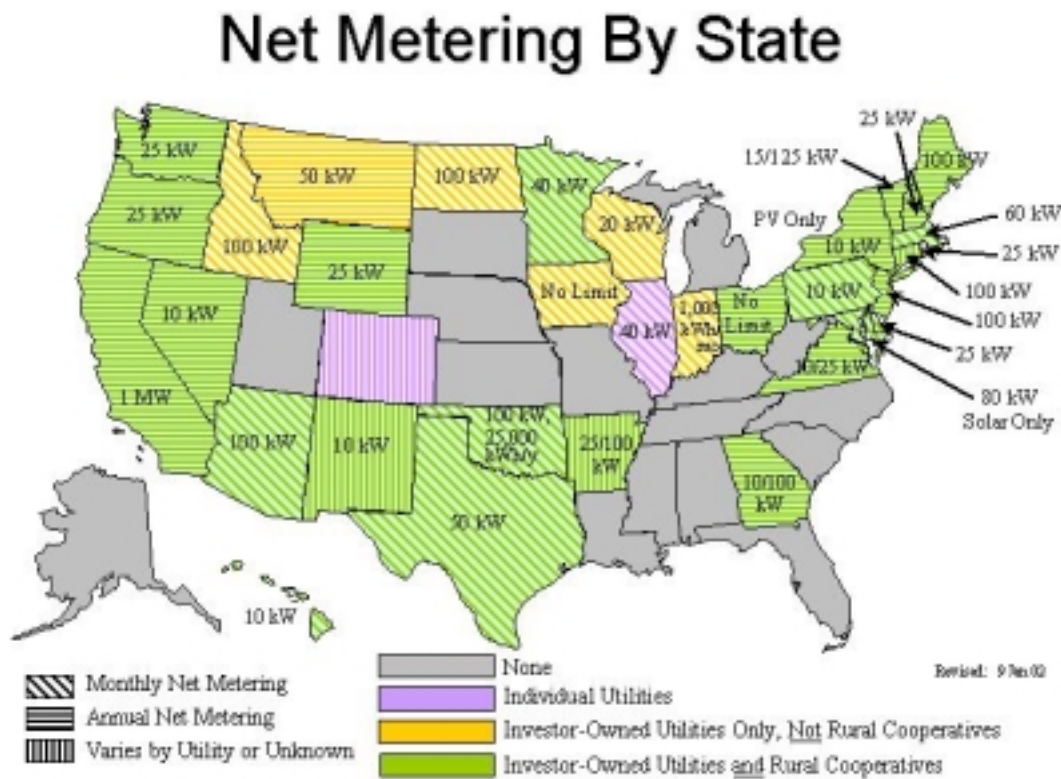
State	Penalties	Status
AZ	30 cents/kWh starting in 2004; proceeds go to solar electric fund to finance solar facilities for schools, cities, counties or state agencies	Commission order in April 2000; rulemaking later in 2000; comprehensive review of policy in 2003 to determine RPS status and level from 2004 onward
CT	Must meet RPS to be licensed; flexible penalties for failing to comply with license conditions include license revocation or suspension, a prohibition from accepting new customers, or civil penalties	Restructuring legislation in 1998; licensing regulations in 1998 established certain RPS provisions; revisions to law in 1999; RPS begins July 1, 2000
ME	Variety of possible sanctions at discretion of Commission including license revocation, monetary penalties, and other appropriate penalties; allows voluntary payment into renewables R&D fund to avoid license revocation	Restructuring legislation in 1997; PUC worked out design details in 1998; revisions to RPS law in May 1999; RPS took effect March 1, 2000; PUC considering proposing legislation to drop RPS in favor of SBC
MA	DOER draft rule requires non-complying retailers to make up any shortfall in the first quarter of the following year and submit a compliance plan, or else face public notice of non-compliance and possible suspension or revocation of license.	Restructuring legislation in 1997; DOER released draft rule in October 2001, seeking public comment; new RPS begins in 2003
NV	Administrative fine that at least equals the cost differential between "just and reasonable" renewable electricity and system power. Exemptions from fines granted if not enough renewable power available at just and reasonable prices.	SB372 signed 06/01, PUC rules initially adopted 12/01, but now re-working to remove soft cap
NJ	Interim RPS rule requires non-complying retailers to make up any shortfall in the following year, or else face financial penalties and/or license revocation or suspension	Restructuring legislation in 1999; draft RPS rule in late 1999; interim rule adopted in 2001, final rule due 18 months later; RPS begins in 4Q 2001
NM	Describes how to request exemption or variance; does not address consequences of exemption or variance being denied	Draft rule from PRC staff currently in rulemaking phase, public comments due Jan-02, seeking to implement in May-02
PA	Unspecified	Legislation in 1996; individual utility settlements in 1998
TX	Penalty for noncompliance is the lesser of 5 cents/kWh or 200% of the average market value of renewable energy credits; under certain circumstances, penalty may not be assessed	Restructuring legislation in 1999; final RPS rule complete in 12/99; credit trading protocol being designed and implemented; RPS begins in 2002, with early compliance beginning in mid 2001
WI	Penalty of \$5,000 - \$500,000 is allowed in legislation	RPS legislation established as part of state budget within a wholesale electricity reform measure in late 1999; final regulation adopted April 2001; utilities contracting for renewable power

Source: Wiser, R. and M. Bolinger, Lawrence Berkeley National Laboratory and K. Porter, National Renewable Energy Laboratory. Updated January 2002.

3.4 - States with Net Metering Policies

Net metering allows customers with generating facilities to turn their electric meters backward when their systems are producing energy in excess of their on-site demand. In this way, net metering enables customers to use their own generation to offset their consumption over a billing period. This offset means that customers receive retail prices for the excess electricity they generate. Without net metering, a second meter is usually installed to measure the electricity that flows back to the provider, with the provider purchasing the power at a rate much lower than the retail rate.

Figure 3.41 Net Metering Policies by State



Source: J. Green, National Renewable Energy Laboratory, January 2002.
<http://www.eren.doe.gov/greenpower/netmetering/index.shtml>

Table 3.41 Summary of State Net Metering Policies

State	Allowable Technology and Size	Allowable Customers	Statewide Limit	Treatment of Net Excess Generation (NEG)	Enacted	Scope of Program
Arizona	Renewables and cogeneration ≤100 kW	All customer classes	None	NEG purchased at avoided cost	1981	All IOUs and RECs
Arkansas	Renewables, fuel cells and microturbines ≤25 kW residential ≤100 kW commercial	All customer classes	None	TBD by Public Service Commission	2001	All utilities
California	Solar and wind ≤1000 kW	All customer classes	None	Annual NEG granted to utilities	2001/1995	All utilities
Colorado	Wind and PV 3 kW, 10 kW	Varies	NA	Varies	1997	Four Colorado utilities
Connecticut	Renewables and fuel cells ≤100 kW	Residential	None	Not specified	1990, updated 1998	All IOUs, No REC in state.
Delaware	Renewables ≤25 kW	All customer classes	None	Not specified	1999	All utilities
Georgia	Solar, wind, fuel cells ≤10 kW residential ≤100 kW commercial	Residential and commercial	0.2% of annual peak demand	Monthly NEG or total generation purchased at avoided cost or higher rate if green priced	2001	All utilities
Hawaii	Solar, wind, biomass, hydro ≤10 kW	Residential and small commercial	0.5% of annual peak demand	Monthly NEG granted to utilities	2001	All utilities
Idaho	All technologies ≤100 kW	Residential and small commercial (Idaho Power only)	None	Monthly NEG purchased at avoided cost	1980	IOUs only, RECs are not rate-regulated
Illinois	Solar and wind ≤40 kW	All customer classes; ComEd only	0.1% of annual peak demand	NEG purchased at avoided cost	2000	Commonwealth Edison
Indiana	Renewables and cogeneration ≤1,000 kWh/month	All customer classes	None	Monthly NEG granted to utilities	1985	IOUs only, RECs are not rate-regulated
Iowa	Renewables and cogeneration (No limit per system)	All customer classes	105 MW	Monthly NEG purchased at avoided cost	1993	IOUs only, RECs are not rate-regulated [2]

Maine	Renewables and fuel cells ≤100 kW	All customer classes	None	Annual NEG granted to utilities	1998	All utilities
Maryland	Solar only ≤80 kW	Residential and schools only	0.2% of 1998 peak	Monthly NEG granted to utilities	1997	All utilities
Massachusetts	Qualifying facilities ≤60 kW	All customer classes	None	Monthly NEG purchased at avoided cost	1997	All utilities
Minnesota	Qualifying facilities ≤40 kW	All customer classes	None	NEG purchased at utility average retail energy rate	1983	All utilities
Montana	Solar, wind and hydro ≤50 kW	All customer classes	None	Annual NEG granted to utilities at the end of each calendar year.	1999	IOUs only
Nevada	Solar and Wind ≤10 kW	All customer classes	First 100 customers for each utility	Monthly or annual NEG granted to utilities	1997	All utilities
New Hampshire	Solar, wind and hydro ≤25 kW	All customers classes	0.05% of utility's annual peak	NEG credited to next month	1998	All utilities
New Jersey	PV and wind ≤100 kW	Residential and small commercial	0.1% of peak or \$2M annual financial impact	Annualized NEG purchased at avoided cost	1999	All utilities
New Mexico	Renewables and cogeneration	All customer classes	None	NEG credited to next month, or monthly NEG purchased at avoided cost (utility choice)	1999	All utilities
New York	Solar only ≤10 kW	Residential only	0.1% 1996 peak demand	Annualized NEG purchased at avoided cost	1997	All utilities
North Dakota	Renewables and cogeneration ≤100 kW	All customer classes	None	Monthly NEG purchased at avoided cost	1991	IOUs only, RECs are not rate-regulated
Ohio	Renewables, microturbines, and fuel cells (no limit per system)	All customer classes	1.0% of aggregate customer demand	NEG credited to next month	1999	All utilities
Oklahoma	Renewables and cogeneration ≤100 kW and ≤25,000 kWh/year	All customer classes	None	Monthly NEG granted to utility	1988	All utilities

Oregon	Solar, wind, fuel cell and hydro ≤25 kW	All customer classes	0.5% of peak demand	Annual NEG granted to low-income programs, credited to customer, or other use determined by Commission	1999	All utilities
Pennsylvania	Renewables and fuel cells ≤10 kW	Residential	None	Monthly NEG granted to utility	1998	All utilities
Rhode Island	Renewables and fuel cells ≤25 kW	All customer classes	1 MW for Narragansett Electric Company	Annual NEG granted to utilities	1998	Narragansett Electric Company
Texas	Renewables only ≤50 kW	All customer classes	None	Monthly NEG purchased at avoided cost	1986	All IOUs and RECs
Vermont	PV, wind, fuel cells ≤15 kW Farm biogas ≤125 kW	Residential, commercial and agricultural	1% of 1996 peak	Annual NEG granted to utilities	1998	All utilities
Virginia	Solar, wind and hydro Residential ≤10 kW Non-residential ≤25 kW	All customer classes	0.1% of peak of previous year	Annual NEG granted to utilities (power purchase agreement is allowed)	1999	All utilities
Washington	Solar, wind, fuel cells and hydro ≤25 kW	All customer classes	0.1% of 1996 peak demand	Annual NEG granted to utility	1998	All utilities
Wisconsin	All technologies ≤20 kW	All retail customers	None	Monthly NEG purchased at retail rate for renewables, avoided cost for non-renewables	1993	IOUs only, RECs are not rate-regulated
Wyoming	Solar, wind and hydro ≤ 25 kW	All customer classes	None	Annual NEG purchased at avoided cost	2001	All IOUs and RECs

Source: National Renewable Energy Lab and Tom Starrs of Kelso Starrs and Associates. January 2002. <http://www.eren.doe.gov/greenpower/netmetering/index.shtml>

Notes:

IOU — Investor-owned utility
GandT — Generation and transmission cooperatives
REC — Rural electric cooperative

[1] For information, see the Database of Statet Incentive for Renewable Energy (<http://www.dcs.ncsu.edu/solar/dsire/dsire.cfm>).

The original format for this table is taken from: Thomas J. Starrs (September 1996). *Net Metering: New Opportunities for Home Power*. Renewable Energy Policy Project, Issue Brief, No. 2. College Park, MD: University of Maryland

3.5 - States with Environmental Disclosure Policies

As electricity markets open to competition, retail consumers are increasingly gaining the ability to choose their electricity suppliers. With this choice comes the need for consumers to have access to information about the price, source, and environmental characteristics of their electricity. For green power marketers in particular, it is important that consumers understand the environmental implications of their energy consumption decisions. To date, more than 20 states have *environmental disclosure* policies in place, requiring electricity suppliers to provide information on fuel sources and, in some cases, emissions associated with electricity generation. Although most of these policies have been adopted in states with retail competition, a handful of states with no plans to implement restructuring have required environmental disclosure. Summaries of state environmental disclosure policies are provided below under the categories full, partial, or proposed. The term *partial disclosure requirements* refers to policies that are not mandatory, do not apply to all retail electricity suppliers, or do not result in direct disclosure to consumers.

Table 3.51 Environmental Disclosure Requirements by State, October 2001

State	Disclosure Requirement	Scope	Frequency	Distribution	Effective Date	Authority
Arkansas	Standards to be set for disclosure of environmental impacts	Electric service providers	TBD	TBD	TBD	Legislature
California	Fuel mix required in standard format.	Electric service providers	Quarterly	Bill insert, offers, and written promotional materials (except ads)	1999	Legislature
Colorado	Fuel mix. Standard format is suggested.	Investor owned utilities with load >100MW	Twice annually	Bill insert or mailing	1999	Public Utility Commission
Connecticut	Fuel mix and air emissions	Electric distribution companies	TBD	TBD	TBD	Legislature
Delaware	Fuel mix	Electric suppliers	Quarterly	Bill insert or mailing, offers, marketing materials	1999	Public Service Commission
Florida	Fuel mix	Investor-owned utilities	Quarterly	On bill or bill insert	1999	Public Service Commission
Illinois	Fuel mix and CO ₂ ; NO _x ; SO ₂ ; high-level and low-level nuclear waste emissions in standard format.	Electric utilities and alternative retail suppliers	Quarterly	Bill insert	1998	Legislature
Maine	Fuel mix and CO ₂ NO _x ; SO ₂ emissions in format similar to sample	Electric service providers (Residential and small commercial customers only.)	Quarterly	Bill insert or mailing and prior to initiation of service.	1999	Public Utilities Commission
Maryland	Fuel mix and CO ₂ ; NO _x ; SO ₂ emissions in standard format	Electric suppliers	Twice annually	Bill insert or mailing and with contracts	2000	Legislature
Massachusetts	Fuel mix and CO ₂ ; NO _x ; SO ₂ emissions in standard format	Competitive suppliers	Quarterly	Bill insert and prior to initiation of service.	1998	Dept. of Telecommunications and Energy
Michigan	Fuel mix and SO ₂ ; CO ₂ ;	Electric utilities	Twice	Bills and on	(2002)	Legislature

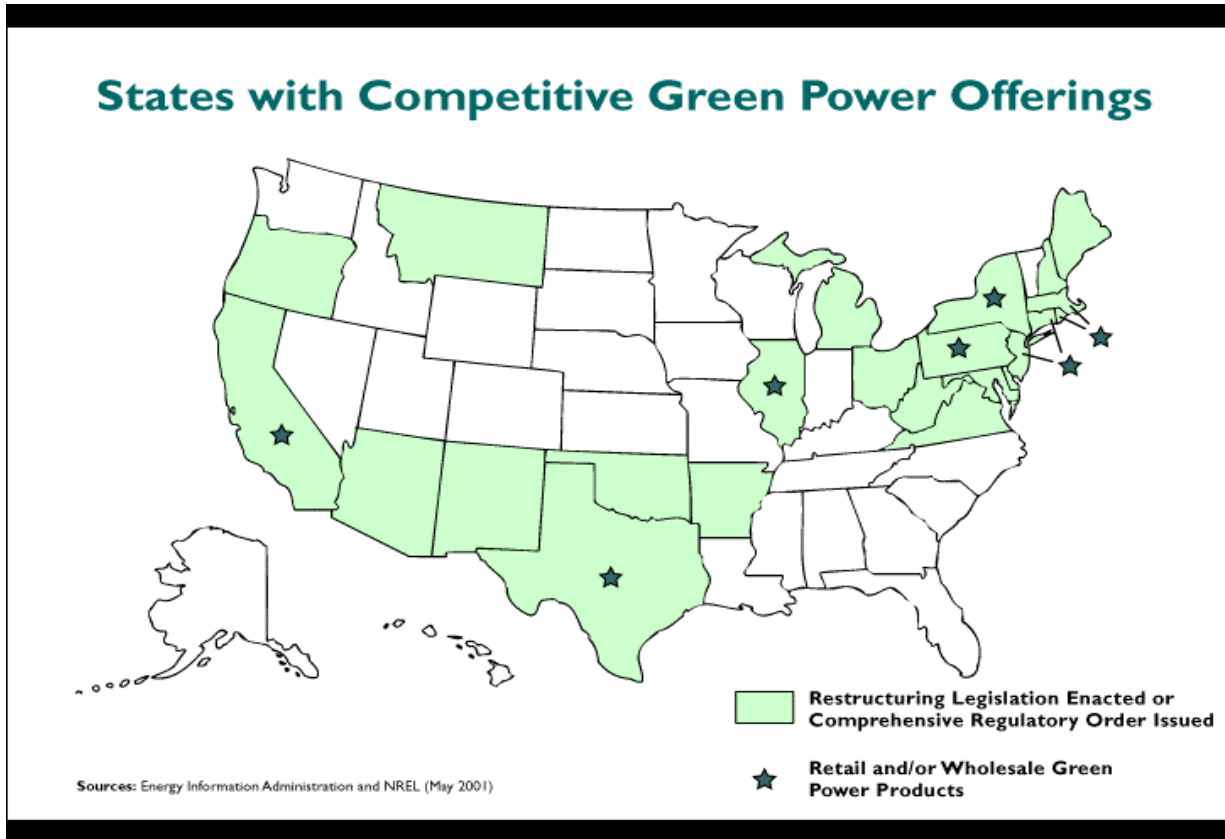
	NO _x ; high-level nuclear waste emissions in standard format	and alternative electric providers	annually	Commission web site		
Minnesota	Fuel mix, air pollutant emissions, and nuclear waste emissions in standard brochure	Rate regulated electric utilities	Twice annually	Web, phone referral on bill, full info on bill insert	(2002)	Public Utilities Commission
New Jersey	Fuel mix, energy efficiency, and CO ₂ ; SO ₂ ; NO _x emissions in standard format	All electric suppliers	Twice annually	Mailings, direct mail marketing, solicitations, contracts	1999	Legislature
New Mexico	Fuel mix and associated emissions, standard format required under proposed rules	Competitive electric suppliers	TBD, proposed annually	TBD	TBD	Legislature
New York	Fuel mix and CO ₂ ; SO ₂ ; NO _x emissions in standard format	Load serving entities	Twice annually	Bill insert and prior to offers	(2002)	Public Service Commission
Ohio	Fuel mix, CO ₂ ; SO ₂ ; NO _x emissions and high-level and low-level radioactive waste in standard format	Retail electric service providers	Annually, plus quarterly comparisons of actual and projected	Bill insert or mailing, and contracts	2001	Legislature
Oregon	Fuel mix and CO ₂ ; SO ₂ ; NO _x ; spent nuclear fuel emissions in standard format	Electric service providers	Quarterly	On bill or insert, marketing materials, contracts, URL on bill	2000	Legislature
Texas	Fuel mix and CO ₂ ; SO ₂ ; NO _x ; Particulates; Nuclear waste emissions in standard format	Retail electric providers	Twice annually	Bill insert or mailing, solicitations, Commission web site	(2002)	Legislature
Washington	Fuel mix in standard format	Retail suppliers	Twice annually (plus two referrals)	Bill insert or mailing, solicitations	2001	Legislature
Arizona	Fuel mix and emissions to extent reasonably known	Electric suppliers including default suppliers	Upon request and written marketing materials	Upon request	2000	Arizona Corporation Commission
District of Columbia	Fuel mix	Retail electricity suppliers	Twice annually to Commission	Supplied only to the Commission	2001	Legislature
Pennsylvania	Fuel mix and energy efficiency	Electric generation supplier	Upon request	Supply to Commission annually	1998	Public Utility Commission
Virginia	Fuel mix and emissions to the extent feasible	Competitive service providers; CSP's making claim-based sales	Annually to extent feasible	"Reported to customers."	(2002)	Virginia State Corporation Commission
Montana	Fuel mix and CO ₂ ; SO ₂ ; NO _x ; spent nuclear waste, hydro	Retail electricity suppliers	Twice annually	Product offers, contracts, ads	TBD	Dept. of Public Service Regulation
West Virginia	Fuel mix and CO ₂ ; SO ₂ ; NO _x and high-level and low-level nuclear waste	Retail electricity suppliers including default suppliers	Supplied to Commission quarterly	Solicitations Posted on company web site	TBD	Public Service Commission

Source: L. Bird and D. Lackaff, National Renewable Energy Laboratory, October 2001.

<http://www.eren.doe.gov/greenpower/disclosetxt.shtml>

3.6 - States with Competitive Green Power Offerings

Green power marketing refers to selling green power in the competitive marketplace, in which multiple suppliers and service offerings exist. Electricity markets are now open to full competition in a number of states, while others are phasing in competition, allowing some customers to choose their electricity supplier. To date, competitive marketers have offered green power to retail or wholesale customers in California, Illinois, Pennsylvania, New Jersey, New York, Texas, and several New England states.



Source: B. Swezey and L. Bird 2000. Updated December 2001.

Table 3.62: New Renewables Capacity Added from Green Power Marketing (in kW)

Source	Added	%	Planned	%
Wind	423,380	98.4	277,200	84.7
Photovoltaics	337	0.1	295	0.1
Landfill Gas	1,600	0.4	0	0.0
Geothermal	5,000	1.2	49,900	15.2
Total	430,317	100.0	327,395	100.0

**Table 3.61 Residential Green Power Product Offerings
(as of April 2001)**

Company	Product Name	Price Premium (¢/kWh)	Monthly Fee	Resource Mix	Green-e Certified
Connecticut¹					
CT Energy Coop	EcoWatt	1.0	Initial \$30	67% small hydro, 27% landfill gas, 6% new wind	✓
Green Mountain Energy Company	Green Mountain Energy	0.5		5% wind, 45% biomass and small hydro	✓
Sun Power Electric	Regen	3.6		100% renewable energy blocks, solar and landfill gas	
Massachusetts					
Sun Power Electric/ Mass Energy Consumers Alliance	Regen	3.6		100% renewable energy blocks, solar and landfill gas	
New Jersey³					
Green Mountain Energy Company	Ecosmart Enviroblend	-1.35-0.45	\$3.95/ mo. \$3.95/ mo.	1% new renewables, 50% large hydro 45% small hydro/landfill gas, 50% large hydro 5% new	✓
Pennsylvania⁴					
ElectricAmerica	50% Hydro	-0.02		50% large hydro	
Energy Cooperative of Pennsylvania	Eco Choice 100	0.7	\$5/year	100% landfill gas, 5% new	✓
Community Energy/PECO Energy	New Wind Energy	2.5		100% wind energy kWh-blocks	
Green Mountain Energy Company	Eco Smart Enviro Blend Nature's Choice	-0.15 0.79 1.35	\$3.95 \$3.95 \$3.95	1% new wind, 99% natural gas and hydro 45% small hydro and landfill gas, 5% new 95% small hydro/landfill gas, 5% new	✓ ✓
Mack Services Group	100% Renewable	1.86		100% landfill gas, 5% new	✓
Rhode Island					
Sun Power Electric	Regen	3.6		100% renewable energy blocks, solar and landfill gas	
Texas Retail Competition Pilot					
Green Mountain Energy Company	100% Wind Power	N/A	\$4.95	100% wind	

¹ Product prices are for Connecticut Light & Power service territory.

² Product prices are for Central Maine Power service territory.

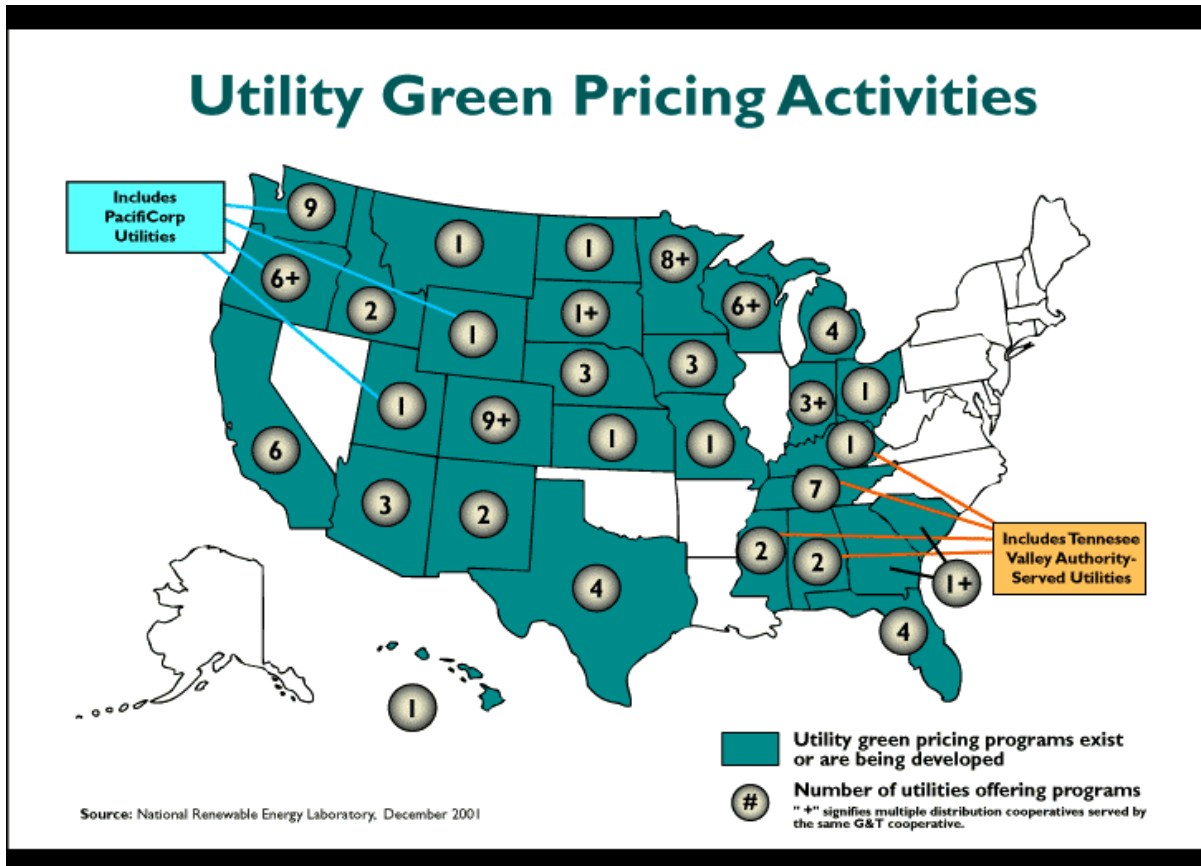
³ Product prices are for Conectiv service territory.

⁴ Product prices are for PECO service territory.

Source: B. Swezey and L. Bird, 2000. Updated April 2001.

3.7 - States with Utility Green Pricing Programs

Green pricing is an optional utility service that allows customers an opportunity to support a greater level of utility company investment in renewable energy technologies. Participating customers pay a premium on their electric bill to cover the extra cost of the renewable energy. Many utilities are offering green pricing to build customer loyalty and expand business lines and expertise prior to electric market competition. To date, more than 90 utilities in 30 states have either implemented or announced plans to offer a green pricing option.



Source: B. Swezey and L. Bird 2000. Updated December 2001.

**Table 3.72 New Renewables Capacity Added from Green Pricing Programs
(in kW)**

Source	Added	%	Planned	%
Wind	180,185	82.7	70,740	62.5
Solar	3,891	1.8	1,570	1.4
Biomass	27,390	12.6	38,960	34.4
Small Hydro	6,500	3.0	1,953	1.7
Total	217,966		113,223	

Table 3.73 - Utility Green Pricing Programs, December 2001

	Utility Name	Program Name	Resource Type	Size	Start Date	Premium
AL	Alabama Power (Southern Company)	EarthCents Solar	central PV	joint 1 MW	2000	\$6.00/100 watts
AL	Huntsville Utilities (TVA)	Green Power Switch	wind, landfill gas, solar	joint 8.7 MW	2000	2.67¢/ kWh
AZ	Arizona Public Service	Solar Partners Program	central PV	1 MW	1996	\$2.64/ 15kWh
AZ	Salt River Project	Earthwise Energy	central PV, landfill gas, small hydro	4.4 MW	1998/ 2001	3.0¢/kWh
AZ	Tucson Electric	GreenWatts	landfill gas, PV	6 kW	2000	7.5-10¢/ kWh
CA	City of Alameda	Clean Future Fund	various, electric vehicles	--	1999	1.0¢/kWh
CA	City of Palo Alto Utilities	Green Resources	biomass, geothermal	N/A	2000	3.0¢/kWh
CA	Los Angeles Dept. of Water and Power	Green Power for a Green LA	wind, landfill gas	25 MW	1999	3.0¢/kWh
CA	Roseville Electric	Green Energy Program	geothermal, PV	9 kW	2000	1.0¢/kWh
CA	Sacramento Municipal Utility District	Greenergy	landfill gas, PV	8.3 MW	1997	1.0¢/kWh
CA	Sacramento Municipal Utility District	PV Pioneers I/II	PV	1.9 MW	1993; 1998	\$4/month
CA	Turlock Irrigation District	Green Valley Energy	existing small hydro	--	1999	~1.0¢/kWh
CO	Colorado Springs Utilities	Green Power	wind	1 MW	1997	3.0¢/kWh
CO	Holy Cross Energy	Wind Power Pioneers	wind	3.0 MW	1997	2.5¢/kWh
CO	Platte River Power Authority: Estes Park, Fort Collins, Longmont, Loveland	Wind Energy Program	wind	5.9 MW	1999	2.5¢/kWh
CO	Public Service Company of Colorado	WindSource	wind	56 MW	1997	2.5¢/kWh
CO	Public Service Company of Colorado	Renewable Energy Trust	PV	100 kW	1993	Contribution
CO	Tri-State Generation & Transmission	Renewable Resource Power Service	wind, landfill gas	planned 2.66 MW	1999	2.5¢/kWh
CO	Yampa Valley Electric Association	Green Power	wind	450 kW	1999	3.0¢/kWh
FL	City of Tallahassee	TBD	TBD	TBD	TBD	TBD
FL	Florida Power & Light	TBD	TBD	TBD	1997	TBD
FL	Gainesville Regional Utilities	Solar for Schools Program	rooftop PV	planned 32 kW	1993/ 1997	\$3.00/50 watts
FL	Gainesville Regional Utilities	TBD	landfill gas	TBD	TBD	TBD
FL	Gulf Power Company (Southern Company)	Solar for Schools; EarthCents Solar	PV in schools; central PV	10 kW; joint 1 MW	1996; 1999	Contribution; \$6.00/ 100 watts
FL	New Smyrna Beach	Green Power	local PV projects	--	1999	Contribution
FL	Tampa Electric Company (TECO)	Smart Source	PV, biomass (co-firing)	3 kW	2000	10.0¢/kWh
GA	Electric Membership Corporation	Green Power EMC	landfill gas	13 MW	2001	TBD
HI	Hawaiian Electric	Sun Power for Schools	PV in schools	22 kW	1996	Contribution

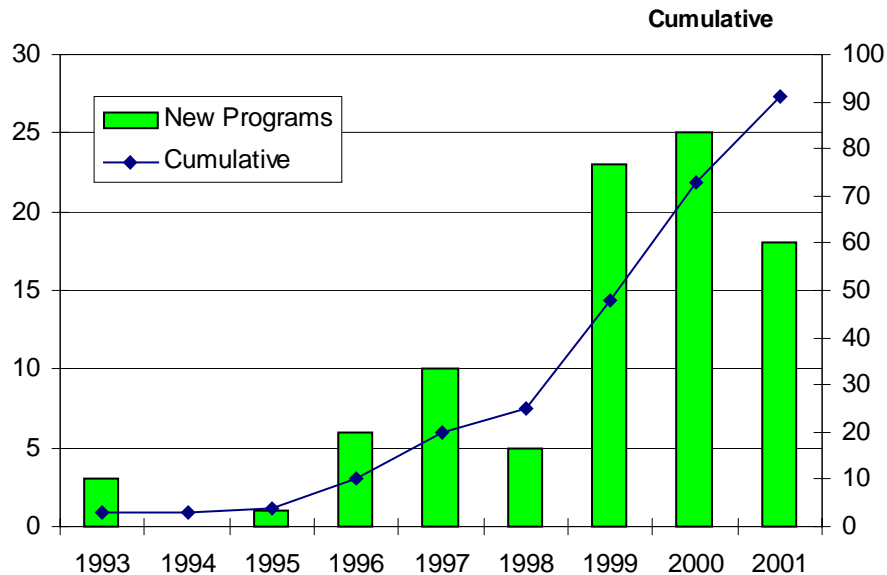
ID	Idaho Power	Green Power Program	various	TBD	2001	Contribution
ID	Avista Utilities	TBD	wind	TBD	2002	1.8¢/kWh
IA	Alliant Energy	Second Nature	landfill gas, wind	4.6 MW	2000	2.0¢/kWh
IA	Cedar Falls Utilities	Wind Energy Electric Project	wind	1.5 MW	1999	Contribution
IA	Waverly Light & Power	Iowa Energy Tags	wind	planned 1.8 MW	2001	2.0¢/kWh
IN	PSI Energy/Cinergy	Green Power Rider	wind, solar, landfill gas, digester gas	TBD	2001	Contribution
IN	Indianapolis Power & Light	Elect PlanSM Green Power Program	geothermal	0.5 aMW	1998	0.9¢/kWh
IN	Wabash Valley Power Assoc.	Enviro Watts	landfill gas	7.5 MW	2000	0.5-1.0¢/kWh
KS	Western Resources	Wind Power	wind	1.5 MW	1999	5.0¢/kWh
KY	Bowling Green Municipal Utilities (TVA)	Green Power Switch	wind, landfill gas, solar	joint 8.7 MW	2000	2.67¢/kWh
MI	Consumers Energy	Green Power Pilot Program	wind, various	up to 50 MW	2001	3.2¢/kWh
MI	Detroit Edison	Solar Currents	central PV	55 kW	1996	\$6.59/100 watts
MI	Lansing Board of Water and Light	GreenWise Electric Power	landfill gas, small hydro	1 aMW	2001	3.0¢/kWh
MI	Traverse City Light and Power	Green Rate	wind	600 kW	1996	1.58¢/kWh
MN	Dakota Electric Association	Wellspring Renewable Wind Energy Program	wind	660 kW	1997	1.28¢/kWh
MN	East River Electric Power Cooperative	Prairie Winds	wind	2.6 MW	2000	3.0¢/kWh
MN	Great River Energy (excluding Dakota)	Wellspring Renewable Wind Energy Program	wind	2 MW	1997	1.28-2.0¢/kWh
MN	Minnesota Power	Wind Sense	wind	1 MW	2000	2.5¢/kWh
MN	Minnkota Power Cooperative	Infinity Wind Energy	wind	900 kW	1999	3.0¢/kWh
MN	Moorhead Public Service	Capture the Wind	wind	750 kW	1998	1.5¢/kWh
MN	Otter Tail Power	Tailwinds	wind	900 kW	2001	2.6¢/kWh
MN	Southern Minnesota Municipal Power Agency	Wind Power	wind	900 kW	2000	3.0¢/kWh
MS	City of Oxford, North East Mississippi Electric Power Asssoc. (TVA)	Green Power Switch	wind, landfill gas, solar	joint 8.7 MW	2000	2.67¢/kWh
MO	City Utilities of Springfield	WindCurrent	wind	purchase from Western	2000	5.0¢/kWh
MT	Flathead Electric Cooperative	Green Power	wind, small hydro	1.0 aMW	1999	2.0¢/kWh
ND	Minnkota Power Cooperative	Infinity Wind Energy	wind	900 kW	1999	3.0¢/kWh
NE	Lincoln Electric System	LES Renewable Energy Program	wind	1.32 MW	1998	4.3¢/kWh

NE	Nebraska Public Power District	Prairie Power Program	TBD	TBD	1999	Contribution
NE	Omaha Public Power District	Energy Choices Program	landfill gas, wind	3.9 MW	2001	3.0¢/kWh
NM	Kit Carson Electric Cooperative (Tri-State)	Renewable Resource Power Service	wind, landfill gas	planned 2.66 MW	2001	2.5¢/kWh
NM	Southwestern Public Service	WindSource	wind	660 kW	1999	3.0¢/kWh
OH	City of Bowling Green	Green Power	small hydro, PV	2 kW	1999	1.38¢/kWh
OR	City of Ashland	Ashland Solar Pioneer Program	PV	30 kW	1999	\$4/month
OR	Eugene Water & Electric Board	EWEB Wind Power	wind	6.5 MW	1999	2.43¢/kWh
OR	Midstate Electric Cooperative	Environmentally Preferred Power	wind, small hydro	0.2 aMW	1999	2.5¢/kWh
OR	Pacific Northwest Generating Cooperative	Green Power	landfill gas	1.1 MW	1998	1.8-2.0¢/kWh
OR	Pacific Power (PacifiCorp)	Blue Sky	wind	joint 3 MW	2000	2.95¢/kWh
OR	Portland General Electric Company	Salmon Friendly and Clean Wind Power	wind, low-impact hydro	planned 14 MW	2000	3.5¢/kWh
SC	Santee Cooper	Green Power Program	landfill gas	2.2 MW	2001	3.0¢/kWh
SD	East River Electric Power Cooperative	Prairie Winds	wind	2.6 MW	2000	3.0¢/kWh
TN	Chattanooga, Gibson Electric, Knoxville, Nashville, Newport, Powell Valley, Sevier County (TVA)	Green Power Switch	landfill gas, solar, wind	joint 8.7 MW	2000	2.67¢/kWh
TX	Austin Energy	GreenChoice	wind, landfill gas, solar	76.7 MW	2000/ 1997	0.17¢/kWh
TX	City Public Service of San Antonio	Windtricity	wind	25 MW	2000	4.0¢/kWh
TX	El Paso Electric	Renewable Energy Tariff	wind	1.32 MW	2001	1.92¢/kWh
TX	Texas New Mexico Power Company	Wind Power	wind	2.6 MW	2001	1.0¢/kWh
UT	Utah Power (PacifiCorp)	Blue Sky	wind	joint 3 MW	2000	2.95¢/kWh
WA	Avista Utilities	TBD	wind	TBD	2002	1.8¢/kWh
WA	Benton County Public Utility District	Green Power Program	landfill gas, wind	1 MW	1999	Contribution
WA	Chelan County PUD	Sustainable Natural Alternative Power	PV, wind	10 kW	2001	Contribution
WA	Clark Public Utilities	Green Lights	PV, wind	TBD	2002	1.5¢/kWh
WA	Orcas Power & Light	Green Power	small hydro, wind, PV	0.5 aMW	1999	3.5¢/kWh
WA	Puget Sound Energy	Green Power	wind, various	TBD	2002	2.0¢/kWh
WA	Pacific Power (PacifiCorp)	Blue Sky	wind	joint 3 MW	2000	2.95¢/kWh

WA	Seattle City Light	TBD	solar, wind, biomass	TBD	2002	Contribution
WA	Snohomish County PUD	Planet Power	wind	0.5aMW	2002	2.0¢/kWh
WA	Tacoma Power	Evergreen Options	small hydro, wind	1 aMW	2000	Contribution
WI	Alliant Energy	Second Nature	wind, landfill gas	4.6 MW	2000	2.0¢/kWh
WI	Dairyland Power Cooperative	Evergreen Renewable Energy Program	wind	660 kW	1997	3.0¢/kWh
WI	Madison Gas & Electric	Wind Power Program	wind	8.22 MW	1999	3.3¢/kWh
WI	Wisconsin Electric Power Company	Energy for Tomorrow	wood, landfill gas, hydro, wind	9.8 MW	1996	2.0¢/kWh
WI	Wisconsin Public Power Inc.	Renewable Energy Program	small hydro, wind, digester gas	6.0 MW	2001	2.0¢/kWh
WI	Wisconsin Public Service	Solar Wise for Schools	PV installations in schools	60 kW	1996	Contribution
WY	Pacific Power (PacifiCorp)	Blue Sky	wind	joint 3 MW	2000	2.95¢/kWh

Source: B. Swezey and L. Bird, National Renewable Energy Laboratory
<http://www.eren.doe.gov/greenpower/summary.shtml>

Figure 3.71 Growth Trend in Utility Green Pricing Programs



Source: B. Swezey and L. Bird 2000.

3.8 - State Incentive Programs

Many states have policies or programs in place to support renewable energy resources, such as tax incentives, industry recruitment incentives, or grant, loan, or rebate programs. The following table lists the incentives currently available by state.

Table 3.91 Financial Incentives for Renewable Energy Resources by State

State	Tax Incentives	Grants, Loans, Rebates	Other Incentives
AL	Wood burning space heating personal deduction	Geo-exchange loan program Renewable fuels grant program (biomass)	
AK		Power project revolving loan fund	
AZ	Qualifying wood stove tax deduction Solar and wind energy systems personal tax credit and sales tax exemption	Sun-Share PV buy-down program	Remote solar electric leasing program
AR	Advanced biofuels corporate tax credit	Alternative fuel vehicle conversion rebate	Emerging manufacturing facilities credit
CA	Solar and wind corporate and personal tax credit Solar personal tax deduction Solar system property tax exemption.	Solar water heater loan programs Various buy-downs Solar electric and geothermal rebates Various grants: electric vehicles, energy research, transportation Innovative building review program	PV Pioneer 2 Geothermal and PV leasing Solar water heating Energy technology export program
CO	Alternative fuel vehicle corporate and personal tax credits		
CT	Alternative fueled vehicle charging station and incremental cost credit Vehicles and equipment sales tax exemption Local option for property tax exemption	Housing investment fund	
DE			
DC			
FL	Solar energy equipment sales tax exemption	Various solar rebate programs	Solar water heater leasing
GA			
HI	Wind and solar corporate and personal tax credits	Solar water heating loan program	

	Alcohol fuels sales tax exemption	Various solar water heating rebate programs	
ID	Solar, wind and geothermal personal tax deduction	Low interest loans for renewable resources	
IL	Special property tax assessment for renewable energy systems	Renewable energy resources rebates/grants Alternative energy bond fund	Industrial recruitment incentive
IN	Renewable energy systems property tax exemption	Alternative power and energy grants Biomass grant program Renewable energy demonstration project grants	
IA	Ethanol based fuels and wind energy equipment sales tax exemption Local option for wind energy special property tax assessment Solar property tax exemption Methane gas conversion property tax exemption	Energy efficiency and renewable energy grants Alternative energy revolving loan fund Building energy management program Iowa renewable fuel fund	
KS	Renewable energy property tax exemption	Renewable energy grants	
KY			
LA			
ME			
MD	Clean energy corporate and personal tax credit Green building corporate and personal tax credit Local option property tax exemption for renewables EV, hybrid, and fuel cell vehicle sales tax exemption Wood heating fuel sales tax exemption	Community energy loan assistance program State energy loan program	
MA	Alternative energy patent exemption Renewable energy equipment sales tax exemption Renewable energy personal income tax exemption Solar and wind corporate excise tax deductions Local property tax exemptions for hydro	Home energy loans	

MI		Community energy project grants	
MN	PV and wind sales tax exemption PV and wind property tax exemption	PV rebates Wind energy agricultural improvement loans Stock loan program	Wind, hydro, digester energy generation incentives Ethanol production incentive
MS		Energy investment loan program	
MO	Wood energy producers corporate tax credit	Low-cost efficiency loan fund	
MT	Alternative energy systems corporate tax credit Wind energy systems corporate tax credit Personal tax credits for wind and residential geothermal systems Renewable energy systems property tax exemption	Alternative energy revolving loan fund	Wind energy systems and manufacturing facility incentives
NE		Low interest loans for energy efficiency	
NV	Renewable energy systems property tax exemption Solar energy producers property tax exemption	Energy efficient appliance loans	
NH	Local option for renewable energy property tax exemption	Renewable energy technology grants	
NJ	Solar and wind energy systems sales tax exemption	NJ clean energy program rebates	
NM			
NY	Solar electric generating equipment personal tax credit Green building corporate tax credit	Renewable R&D grants Energy Smart loans Solar system rebates	
NC	All renewables - corporate and personal tax credits Active solar heating/cooling property tax exemption		Renewable energy equipment manufacture incentives
ND	Geothermal, solar, and wind corporate and personal tax credits and property tax exemptions Large wind property tax incentive and sales tax exemption		

OH	Conversion facilities corporate, sales and property tax exemptions	Renewable energy loans	
OK			
OR	Business energy tax credit Renewable energy system property tax exemption and personal tax credit	Various solar water heater rebates and loan programs Remote water pumping rebates Utility independent home rebates Small scale energy loans	Green building initiative
PA		Alternative fuels incentive grants PV grants	
RI	Renewable energy personal tax credit and property tax exemption Renewable energy sales tax credit	PV and wind rebates Customer education and market building program	Renewable generation supply incentive Small customer incentives for green power marketers
SC		Palmetto Electric rebate program	
SD	Renewable energy systems property tax exemption		
TN		Small business energy loans	
TX	Solar energy device corporate tax deduction Solar systems manufacturer franchise tax exemption Solar and wind systems property tax exemption	Home energy air conditioning and appliance rebates Home energy loans	PV water pump sales program
UT	Renewable energy systems corporate and personal tax credits		
VT	Local option for property tax exemption Sales tax exemption for net metering equipment		
VA	Local option property tax exemption for solar	Green building incentives Low income loans for energy conservation improvements	Solar manufacturing incentive VA Alliance for solar electricity incentives
WA	Sales and use tax exemption High technology product manufacturers excise tax exemption	Off-grid PV buy-down program Rooftop solar loans	

WV	Corporate tax credit and property tax exemption for wind facilities		
WI	Solar and wind energy equipment property tax exemption	Municipal utility solar energy rebates Renewable energy assistance program grants	
WY			PV leasing program

Source: North Carolina Solar Center, Database of State Incentives for Renewable Energy

<http://www.ies.ncsu.edu/dsire/summarytables/financial.cfm?&CurrentPageID=7>, January 17, 2002

3.9 - Federal Incentives – Renewable Energy Production Incentive – Project Summary

REPI Year	Tier	Technology	Cumulative Plant Capacity (kW)	New Plant Capacity (kW)	Total Annual Net Generation (kWh)	States
1994	1	PV	742	742	501,898	CA
1994	1	Wind	5,000	5,000	6,074,618	CA
1994	2	BioPower (open loop)	96,830	96,830	38,678,720	CA , OR , PA
1995	1	PV	1,275	533	933,668	CA
1995	1	Wind	5,080	80	12,975,624	CA , IA
1995	2	BioPower (open loop)	99,290	2,460	138,595,454	CA , OR , PA
1996	1	PV	2,186	911	1,780,449	CA , NY
1996	1	Wind	5,680	600	10,434,434	CA , IA , MI
1996	2	BioPower (open loop)	199,290	100,000	164,735,427	CA , OR , PA
1997	1	PV	2,487	301	1,863,834	CA , FL
1997	1	Wind	5,775	95	7,542,593	CA , IA , MI
1997	2	BioPower (open loop)	253,228	53,938	448,615,348	CA , FL , OR , PA , WA
1998	1	Fuel Cell	200	200	612,215	NY
1998	1	PV	2,663	177	2,100,927	CA , FL , NY
1998	1	Wind	7,238	1,463	4,705,382	AK , CA , IA , MI , WY
1998	2	BioPower (open loop)	307,064	53,836	521,480,500	CA , FL , OR , PA , WA , WI
1999	1	Fuel Cell	200	0	652,706	NY
1999	1	PV	2,978	315	2,783,839	AZ , CA , FL , NY , TX
1999	1	Wind	24,565	17,327	32,726,901	AK , CA , IA , MI , MN , NE , WY
1999	2	BioPower (open loop)	317,719	10,655	469,694,174	CA , FL , OR , PA , WA , WI
2000	1	Fuel Cell	200	0	766,432	NY
2000	1	PV	3,152	173	3,104,928	AZ , CA , FL , NY , TX
2000	1	Wind	29,005	4,440	74,702,688	AK , CA , IA , MI , MN , NE , WY
2000	2	BioPower (open loop)	325,230	7,511	606,367,746	CA , FL , OR , PA , WA , WI

3.10 - Federal Incentives – Renewable Energy Production Incentive – BioPower (open loop) Project Summary

REPI Year	Tier	Technology	Cumulative Plant Capacity (kW)	New Plant Capacity (kW)	Total Annual Net Generation (kWh)	States
1994	2	Landfill Gas	96,830	96,830	38,678,720	CA , OR , PA
1995	2	Landfill Gas	99,290	2,460	138,595,454	CA , OR , PA
1996	2	Animal Waste	100,000	100,000	29,897,768	CA
1996	2	Landfill Gas	99,290	0	134,837,659	CA , OR , PA
1996	2	Total	199,290	100,000	164,735,427	CA , OR , PA
1997	2	Animal Waste	100,000	0	42,220,343	CA
1997	2	Landfill Gas	101,228	1,938	193,534,942	CA , FL , OR , PA
1997	2	Wood Waste	52,000	52,000	212,860,063	WA
1997	2	Total	253,228	53,938	448,615,348	CA , FL , OR , PA , WA
1998	2	Animal Waste	100,000	0	46,637,790	CA
1998	2	Landfill Gas	155,064	53,836	228,559,836	CA , FL , OR , PA , WI
1998	2	Wood Waste	52,000	0	246,282,874	WA
1998	2	Total	307,064	53,836	521,480,500	CA , FL , OR , PA , WA , WI
1999	2	Animal Waste	100,000	0	46,949,282	CA
1999	2	Landfill Gas	162,919	7,855	190,076,865	CA , FL , OR , PA , WA , WI
1999	2	Sewage Gas	2,800	2,800	6,745,066	CA
1999	2	Wood Waste	52,000	0	225,922,961	WA
1999	2	Total	317,719	10,655	469,694,174	CA , FL , OR , PA , WA , WI
2000	2	Animal Waste	100,000	0	45,465,049	CA
2000	2	Landfill Gas	170,430	7,511	335,839,468	CA , FL , OR , PA , WA , WI
2000	2	Sewage Gas	2,800	0	0	CA
2000	2	Wood Waste	52,000	0	225,063,229	WA
2000	2	Total	325,230	7,511	606,367,746	CA , FL , OR , PA , WA , WI